

From: Mozafari, Brenda
Sent: Friday, July 29, 2011 1:00 PM
To: 'Caves, John'; 'Bass, Kimberly'
Cc: Saba, Farideh; Alexion, Thomas
Subject: MUR RAI (Cont/Vent ME6169)

John,

By letter dated April 28, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11124A180), Carolina Power & Light Company (the licensee) requested approval from the U.S. Nuclear Regulatory Commission (NRC) to increase the core thermal power level of Shearon Harris Nuclear Power Plant (HNP), Unit 1 from 2,900 megawatts thermal (MWt) to 2,948 MWt, an increase of approximately 1.66% over the present licensed power level and to change the power plant technical specifications accordingly.

The NRC staff has reviewed the licensee's submittal and determined that the following additional information is needed to complete the review.

The NRC requests that the licensee respond to this request for additional information (RAI) within 30 days of the date of this email. If the licensee concludes that more than 30 days are required to respond to the RAI, the licensee should request additional time, including a basis for why the extension is needed.

Contact me at the number below or by e-mail if you have any questions on this issue or if you require additional time to submit your response.

Brenda L. Mozafari
Senior Project Manager
Robinson and Harris Nuclear Plants
301-415-2020

REQUEST FOR ADDITIONAL INFORMATION
SHEARON HARRIS UNIT 1, LICENSE AMENDMENT REQUEST
MEASUREMENT UNCERTAINTY RECAPTURE POWER UPRATE
(TAC NO. ME6169)

After reviewing a request from the licensee of the Shearon Harris Nuclear Power Plant (HNP), Unit 1 for a license amendment to change the Technical Specifications for a measurement uncertainty recapture (MUR) power uprate, the NRC staff has determined additional information is needed to complete the review.

Containment and Ventilation request for additional information (RAI):

Section II.2.40, "Mass and Energy Releases," of Enclosure 2 to the license amendment request (LAR) discusses the EPITOME code error. EPITOME is a code used by Westinghouse in the loss-of-coolant accident (LOCA) long-term mass and energy (M&E) calculation, which supplies

input to the containment response. Westinghouse discovered that the computer code (EPITOME) used to generate the M&E inputs for the containment peak pressure analysis contains an error which could result in an increase in the containment pressure and temperature for the double ended pump suction LOCA, including a maximum increase in the peak containment pressure of up to 5 psi and temperature of up to 5.5 deg F. The licensee states:

The Harris Nuclear Power Plant (HNP) power uprate LOCA long-term mass and energy evaluation was predicated on no changes to the existing mass and energy release analysis of record due to the power uprate.

Since the licensee used the EPITOME code in its existing M&E release analysis for HNP, provide information on how this code error affects HNP's containment response analysis for a LOCA, specifically regarding the calculated peak pressure and peak temperature.